

WHAT IS CLAIMED IS:

1. A method of making a preform, said method comprising a first step of forming a first collapsed body, and a second step of forming a second collapsed body by integrally depositing a glass material layer to become a part of a cladding region onto an outer periphery of said first collapsed body with integrated with;

said first step including a first collapsing step in which, in a state where a core rod to become a core region is inserted in a first cladding tube to become a part of said cladding region, said core rod and first cladding tube are integrated by heating, and a first elongating step of elongating said collapsed body obtained by said first collapsing body until a predetermined outer diameter is attained;

said second step including a second collapsing step in which, in a state where said first collapsed body obtained by said first step is inserted in a second cladding tube to become a part of said cladding region, said first collapsed body and second cladding tube are integrated by heating.

2. A method of making a preform according to claim 1, further comprising an etching step performed after said first elongating step, said etching step etching a surface of said elongated collapsed body obtained by said first elongating step.

3. A method of making a preform according to claim

2, wherein an outer peripheral portion of said first collapsed body to be etched in said etching step has a thickness of 1.0 to 2.5 mm.

5 4. A method of making a preform according to claim 1, wherein said first collapsed body has an OH-radical concentration of 1 ppm or less therewithin.

5. A method of making a preform according to claim 1, wherein said second collapsed body has an OH-radical concentration of 3 ppm or less therewithin.

10 6. A method of making a preform according to claim 1, wherein said collapsed body obtained by said first collapsing step is elongated in said first elongating step until the outer diameter after elongation becomes 1/2 or less of that before elongation.

15 7. A method of making a preform according to claim 1, wherein said collapsed body obtained by said first collapsing step has an outer diameter of 4.5 times or more but 6.5 times or less that of said core rod at the time when said first collapsing step ends.

20 8. A method of making a preform according to claim 1, wherein said second collapsed body has an outer diameter of 14 times or more that of said core rod at the time when said second collapsing step ends.

25 9. A method of making a preform according to claim 1, further comprising a second elongating step of elongating said second collapsed body obtained by said second collapsing

step until a predetermined outer diameter is attained.

10. A method of making a preform according to claim 1, further comprising a glass depositing step of depositing a glass soot body on an outer peripheral surface of said second collapsed body, and sintering said glass soot body so as to form a glass material layer to become a jacket layer.

11. A method of making a preform according to claim 1, wherein each of said first and second collapsing steps is carried out by using one of an electric heater and a flame, said flame being obtained by burning one of O₂ and air with a hydrogen fuel, or burning one of O₂ and air with a hydrocarbon fuel.

12. A method of making a preform according to claim 1, wherein said first cladding tube includes silica glass doped with a predetermined amount of fluorine.

13. A method of making a preform according to claim 12, wherein said second cladding tube includes silica glass doped with a predetermined amount of fluorine.

14. A method of making a preform according to claim 12, wherein said second cladding tube includes one of pure silica glass and silica glass doped with a predetermined amount of chlorine.

15. A method of making an optical fiber comprising the steps of:

25 preparing the preform according to claim 10; and drawing said preform while heating a part of said

preform prepared.

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